

What is claimed is:

1. A method in an interactive television system for mitigating interruptions during television viewing, the method comprising:

5 receiving a television signal from a signal source;
displaying the television signal;
detecting a request from a remote device to establish communication with the interactive television system; and
automatically buffering the television signal for subsequent playback after a
10 user responds to the request.

2. The method of claim 1, further comprising:
prompting a user to accept or reject the request; and
in response to the user accepting the request, establishing communication
15 with the remote device.

3. The method of claim 2, further comprising:
in response to the communication being terminated, automatically playing
back the television signal being buffered from a point in time at which the request
20 was detected.

4. The method of claim 2, further comprising:
in response to the communication being terminated, automatically playing
back the television signal being buffered from a point in time at which the request
25 was accepted.

5. The method of claim 2, further comprising:
in response to a user command, playing back the television signal being buffered while the communication is in progress.

5

6. The method of claim 1, further comprising:
in response to the user rejecting the request, automatically playing back the television signal being buffered from a point in time at which the request was detected.

10

7. The method of claim 1, further comprising:
in response to the user not accepting the request within an established time interval, automatically playing back the television signal being buffered from a point in time at which the request was detected.

15

8. The method of claim 1, wherein buffering comprises:
encoding the television signal; and
storing the encoded television signal in a storage device.

20

9. The method of claim 2, wherein prompting comprises:
identifying a caller associated with the remote device using information contained within the request; and
notifying the user concerning the identity of the caller.

10. The method of claim 1, wherein the request comprises a request to establish at least one communication channel selected from the group consisting of a video communication channel, an audio communication channel, and a text communication channel.

5

11. The method of claim 1, further comprising:

in response to a user responding to the request, automatically playing back the television signal being buffered; and

during automatic playback of the buffered television signal, resuming display
10 of a real-time television signal from the signal source in response to a user command.

12. The method of claim 11, wherein resuming comprises:

playing back the buffered television signal at a modified rate in response to a
15 transport control.

13. A method in an interactive television system for mitigating interruptions during television viewing, the method comprising:

receiving a television signal from a signal source;

20 displaying the television signal;

detecting a request from a remote device to establish communication with the interactive television system;

prompting a user to accept or reject the request; and

in response to the user accepting the request, automatically buffering the television signal for subsequent playback after communication with the remote device is terminated.

5 14. The method of claim 13, further comprising:

in response to the user accepting the request, establishing communication with the remote device.

15. The method of claim 14, further comprising:

10 in response to the communication being terminated, automatically playing back the television signal being buffered from a point in time at which the request was accepted.

16. The method of claim 13, wherein buffering comprises:

15 encoding the television signal; and
storing the encoded television signal in a storage device.

17. The method of claim 13, wherein prompting comprises:

identifying a caller associated with the remote device using information
20 contained within the request; and
notifying the user concerning the identity of the caller.

18. The method of claim 13, wherein the request comprises a request to establish at least one communication channel selected from the group consisting of

a video communication channel, an audio communication channel, and a text communication channel.

19. The method of claim 1, further comprising:

5 in response to a user responding to the request, automatically playing back the television signal being buffered; and

during automatic playback of the buffered television signal, resuming display of a real-time television signal from the signal source in response to a user command.

10

20. The method of claim 19, wherein resuming comprises:

playing back the buffered television signal at a modified rate in response to a transport control.

15 21. A method in an interactive television system for mitigating interruptions during television viewing, the method comprising:

receiving a television signal from a signal source;

displaying the television signal;

20 sending a request to a remote device to establish communication between the remote device and the interactive television system; and

automatically buffering the television signal for subsequent playback after completion of the communication.

22. The method of claim 21, wherein the television signal is automatically
25 buffered in response to sending the request.

23. The method of claim 21, wherein the television signal is automatically buffered in response to the request being accepted by the remote device.

5 24. The method of claim 21, further comprising:
in response to the request being rejected by the remote device, automatically playing back the television signal being buffered from a point in time at which the request was sent.

10 25. The method of claim 21, further comprising:
in response to the request being accepted by the remote device:
establishing communication with the remote device; and
in response to the communication being terminated, playing back the television signal being buffered from a point in time at which the request was
15 sent.

26. The method of claim 21, further comprising:
in response to the request being accepted by the remote device:
establishing communication with the remote device; and
20 in response to the communication being terminated, playing back the television signal being buffered from a point in time at which the request was accepted.

27. The method of claim 21, further comprising:

in response to the request being accepted by the remote device, establishing communication with the remote device;

automatically playing back the television signal being buffered; and

during automatic playback of the buffered television signal, resuming display
5 of a real-time television signal from the signal source in response to a user command.

28. The method of claim 27, wherein resuming comprises:

playing back the buffered television signal at a modified rate in response to a
10 transport control.

29. The method of claim 21, further comprising:

in response to the request being accepted by the remote device, establishing communication with the remote device; and

15 in response to a user command, playing back the television signal being buffered while the communication is in progress.

30. The method of claim 21, wherein buffering comprises:

encoding the television signal; and

20 storing the encoded television signal in a storage device.

31. An interactive television system for mitigating interruptions during television viewing, the system comprising:

a tuner that receives a television signal from a signal source;

25 a video controller that displays the television signal on a display device;

a detection component that detects a request from a remote device to establish communication with the interactive television system; and

a buffering component that automatically buffers the television signal for subsequent playback after a user responds to the request.

5

32. The system of claim 31, further comprising:

a prompting component that prompts a user to accept or reject the request; and

a communication component that, in response to the user accepting the request, establishes communication with the remote device.

10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100
105
110
115
120
125
130
135
140
145
150
155
160
165
170
175
180
185
190
195
200
205
210
215
220
225
230
235
240
245
250
255
260
265
270
275
280
285
290
295
300
305
310
315
320
325
330
335
340
345
350
355
360
365
370
375
380
385
390
395
400
405
410
415
420
425
430
435
440
445
450
455
460
465
470
475
480
485
490
495
500
505
510
515
520
525
530
535
540
545
550
555
560
565
570
575
580
585
590
595
600
605
610
615
620
625
630
635
640
645
650
655
660
665
670
675
680
685
690
695
700
705
710
715
720
725
730
735
740
745
750
755
760
765
770
775
780
785
790
795
800
805
810
815
820
825
830
835
840
845
850
855
860
865
870
875
880
885
890
895
900
905
910
915
920
925
930
935
940
945
950
955
960
965
970
975
980
985
990
995

33. The system of claim 32, further comprising:

a playback component that, in response to the communication being terminated, automatically plays back the television signal being buffered from a point in time at which the request was detected.

34. The system of claim 32, further comprising:

a playback component that, in response to the communication being terminated, automatically plays back the television signal being buffered from a point in time at which the request was accepted.

35. The system of claim 32, further comprising:

a playback component that, in response to a user command, plays back the television signal being buffered while the communication is in progress.

25

36. The system of claim 31, further comprising:

a playback component that, in response to the user rejecting the request, automatically plays back the television signal being buffered from a point in time at which the request was detected.

5

37. The system of claim 31, further comprising:

a playback component that, in response to the user not accepting the request within an established time interval, automatically plays back the television signal being buffered from a point in time at which the request was detected.

10

38. The system of claim 31, wherein the buffering component comprises:

an encoder that encodes the television signal; and
a storage device that stores the encoded television signal.

15

39. The system of claim 32, further comprising:

an identification component that identifies a caller associated with the remote device using information contained within the request; and
wherein the prompting component further notifies the user concerning the identity of the caller.

20

40. The system of claim 31, wherein the request comprises a request to establish at least one communication channel selected from the group consisting of a video communication channel, an audio communication channel, and a text communication channel.

25

41. The system of claim 31, further comprising:

a playback component that, in response to a user responding to the request, automatically plays back the television signal being buffered; and

wherein the playback component, during automatic playback of the buffered television signal, resumes display of a real-time television signal from the signal source in response to a user command.

42. The system of claim 11, wherein the playback component plays back the buffered television signal at a modified rate in response to a transport control.

43. An interactive television system for mitigating interruptions during television viewing, the system comprising:

a tuner that receives a television signal from a signal source;

a video controller that displays the television signal on a display device;

a detection component that detects a request from a remote device to establish communication with the interactive television system;

a prompting component that prompts a user to accept or reject the request;

and

a buffering component that, in response to the user accepting the request, automatically buffers the television signal for subsequent playback after communication with the remote device is terminated.

44. The system of claim 43, further comprising:

a communication component that establishes communication with the remote device in response to the user accepting the request.

45. The system of claim 44, further comprising:

a playback component that, in response to the communication being terminated, automatically plays back the television signal being buffered from a point
5 in time at which the request was accepted.

46. The system of claim 43, wherein the buffering component comprises:

an encoder that encodes the television signal; and
a storage device that stores the encoded television signal.

10

47. The system of claim 43, further comprising:

an identification component that identifies a caller associated with the remote device using information contained within the request; and
wherein the prompting component further notifies the user concerning the
15 identity of the caller.

48. The system of claim 43, wherein the request comprises a request to establish at least one communication channel selected from the group consisting of a video communication channel, an audio communication channel, and a text
20 communication channel.

49. The system of claim 41, further comprising:

a playback component that, in response to a user responding to the request, automatically plays back the television signal being buffered; and

wherein the playback component, during automatic playback of the buffered television signal, resumes display of a real-time television signal from the signal source in response to a user command.

5 50. The system of claim 49, wherein the playback component plays back the buffered television signal at a modified rate in response to a transport control.

51. A system for mitigating interruptions during television viewing, the system comprising:

10 a tuner that receives a television signal from a signal source;
 a video controller that displays the television signal on a display device;
 a network interface that sends a request to a remote device to establish communication between the remote device and the interactive television system; and
 a buffering component that automatically buffers the television signal for
15 subsequent playback after completion of the communication.

52. The system of claim 51, wherein buffering component automatically buffers the television signal in response the request being sent.

20 53. The system of claim 51, wherein the buffering component automatically buffers the television signal in response to the request being accepted by the remote device.

54. The system of claim 51, further comprising:

a playback component that, in response to the request being rejected by the remote device, automatically plays back the television signal being buffered from a point in time at which the request was sent.

5 55. The system of claim 51, further comprising:

a communication component that, in response to the request being accepted by the remote device, establishes communication with the remote device; and

a playback component that, in response to the communication being terminated, plays back the television signal being buffered from a point in time at
10 which the request was sent.

56. The system of claim 51, further comprising:

a communication component that, in response to the request being accepted by the remote device, establishes communication with the remote device; and

15 a playback component that, in response to the communication being terminated, plays back the television signal being buffered from a point in time at which the request was accepted.

57. The system of claim 51, further comprising:

20 a communication component that, in response to the request being accepted by the remote device, establishes communication with the remote device; and

a playback component that automatically plays back the television signal being buffered in response to the establishment of communication with the remote device; and

wherein the playback component, during automatic playback of the buffered television signal, resumes display of a real-time television signal from the signal source in response to a user command.

5 58. The system of claim 57, wherein the playback component plays back the buffered television signal at a modified rate in response to a transport control.

59. The system of claim 51, further comprising:

 a communication component that, in response to the request being accepted
10 establishes communication with the remote device; and
 a playback component that, in response to a user command, plays back the television signal being buffered while the communication is in progress.

60. The system of claim 51, wherein buffering component comprises:

15 an encoder that encodes the television signal; and
 a storage device that stores the encoded television signal.

61. A method in an interactive television system for mitigating interruptions during television viewing, the method comprising:

20 receiving a television signal from a signal source;
 displaying the television signal;
 detecting a request from a remote device to establish communication with the interactive television system;
 automatically buffering the television signal for subsequent playback after a
25 user responds to the request;

identifying a caller associated with the remote device using information contained within the request;

notifying a user of the interactive television system concerning the identity of the caller;

5 prompting the user to accept or reject the request;

in response to the user accepting the request, establishing communication with the remote device; and

in response to the communication being terminated, automatically playing back the television signal being buffered from a point in time at which the request
10 was detected.

62. An interactive television system for mitigating interruptions during television viewing, the system comprising:

a tuner that receives a television signal from a signal source;

15 a video controller that displays the television signal on a display device;

a detection component that detects a request from a remote device to establish communication with the interactive television system;

a buffering component that automatically buffers the television signal for subsequent playback after a user responds to the request;

20 an identification component that identifies a caller associated with the remote device using information contained within the request;

a prompting component that notifies a user of the interactive television system concerning the identity of the caller and prompts the user to accept or reject the request;

a communication component that, in response to the user accepting the request, establishes communication with the remote device; and

a playback component that, in response to the communication being terminated, automatically plays back the television signal being buffered from a point
5 in time at which the request was detected.

63. A interactive television system for mitigating interruptions during television viewing, the system comprising:

means for receiving a television signal from a signal source;

10 means for displaying the television signal;

means for detecting a request from a remote device to establish communication with the interactive television system; and

means for automatically buffering the television signal for subsequent playback after a user responds to the request.

15

64. An interactive television system for mitigating interruptions during television viewing, the system comprising:

means for receiving a television signal from a signal source;

means for displaying the television signal;

20 means for detecting a request from a remote device to establish communication with the interactive television system;

means for prompting a user to accept or reject the request; and

means for automatically buffering the television signal for subsequent playback in response to the user accepting the request.

25

65. An interactive television system for mitigating interruptions during television viewing, the system comprising:

means for receiving a television signal from a signal source;

means for displaying the television signal;

5 means for sending a request to a remote device to establish communication between the remote device and the interactive television system; and

means for automatically buffering the television signal for subsequent playback after completion of the communication.

Patent 6,444,000